

Production and Detection of Hyperfragments in High Energy Nucleus-Nucleus Collisions*

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We discuss electromagnetic production of hyperfragments induced by the extremely intense flux of photons generated by heavy target nuclei and seen by rapidly moving projectile nuclei in high energy distant nucleus-nucleus collisions. The cross section estimated using Williams-Weizsäcker method is found to be accessible to future experiments at the Relativistic Heavy Ion Collider. We also discuss its signature and detection.

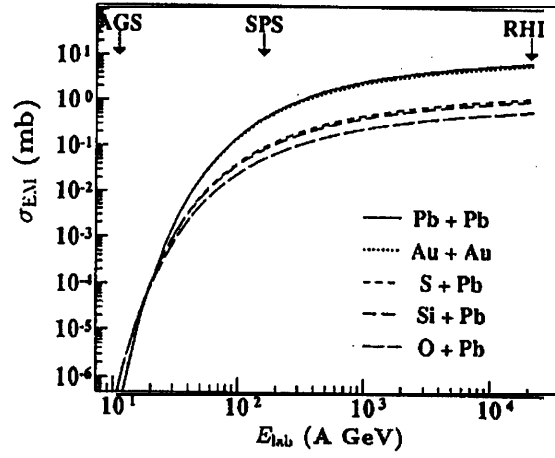


Fig. 2 – Estimated cross sections for electromagnetic production of hyperfragments in nucleus-nucleus collisions.

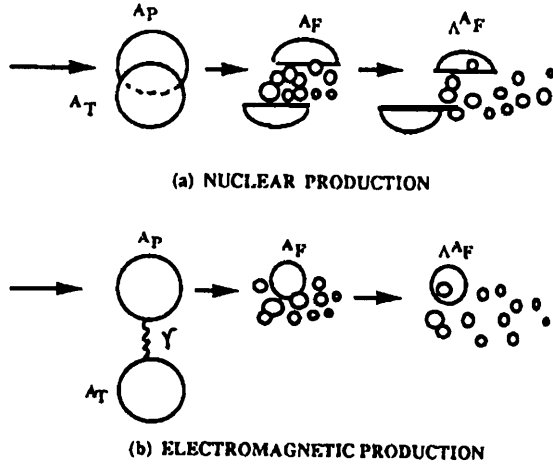


Fig. 1 – Hyperfragment production in high energy nucleus-nucleus collisions by nuclear and electromagnetic modes.

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